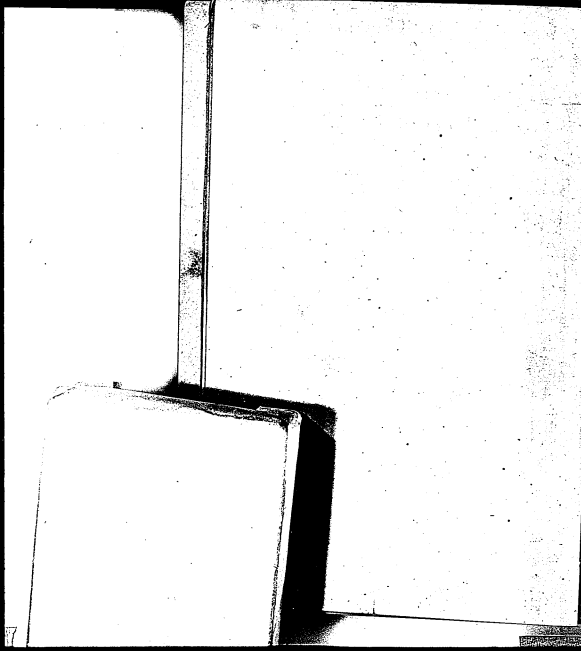
Lamp Factory Notebook, N-86-10-05

This notebook covers the period October 1886. The entries are by an unknown laboratory assistant and relate to carbonization experiments for lamp filaments. The experiments are numbered 1 through 11. The spine is labeled "33." The book is unpaginated.

Experiments on Carbonizing in sealed Tube.

Exp. No. 1.— Bamboo splints in sealed Tube in H_2O colored with Analine Violet @ Temperature of 500° Fahr. (Gradual rise) Carbonizing imperfect.— Color penetrated about 1/8 through the splint.

Oct. 5th 1886. Object = to drive the Color through the filament.

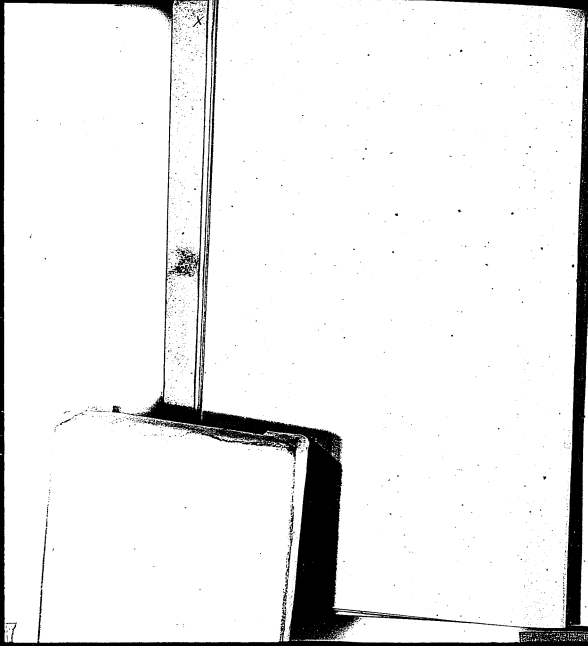


Exp. Nº 2.– Same conditions as Nº 1 – – temperature 70° Fahr. (gradual rise) Carbonization complete.

Oct. 6th 1886.

Oct 7th 86

Exp. No 3. One rg. H. fibre in sealed tube, in coal-tar, raised to a temp. of 700° Fahr. (gradual rise). Am driven through filament. Filament received good preliminary Carbonization Sent to Carbonizing Dept. for final Carbonization as Order No 11 Oct. 7th 1886.



Exp. No 4. 10/8/86

Twenty-four reg. H. fibres in a sealed tube, in coal-bar (same as No 31), raised to Temp. of 700° Fahr. Not carbonized — has driven into fibre. Sent to Carbonizing Dept. as Order No (12 fibres) Oct. 9th/86.

No. 6. 10/9/86

Fibre in Carbon Paper examined in molten lead for five (5) minutes. Carbonization imperfect.

Oct. 9th 1886

No 6 19/9/86

(2) One Bamboo Fibre immersed in molten-lead just below the boiling point for five (5) minutes.—
Carbonisations Goods
Oct: 9th '86.

(3) Eighteen Bamboo fibres in forms, immersed as above. Lead came in assumed fibres— Gave 3 lb: Force
Oct: 11th '86

(5) Eighteen fibres in forms, same as above, only brown paper just between forms to keep lead out. Gave 14 lb Force.
Oct: 11th '86

No. 7

Four Bamboo fibres in sealed glass tube, in coal-bath. Raised to temp. of 700° Fahr.; cooled down, then raised again to 700°, and kept there 30 minutes. Gave 2 fibres to Force.

Oct. 11th 86.

No. 8.

Epithelium fibres in sealed glass tube, in molasses. gradually raised to temperature of 600° Fahr, and kept there one hour.

Molasses forced into fibres.

Gave to Force 10 fibres.

Oct. 11th 186

15. Rog. A. Carbon in sealed glass
tube, in Coal-tar. gradually raised
to temp. of 700°. Fahr.
Oct. 14th 1886

No 10

Carbonized in Lead:—

Bamboo Fibres in carbon box, covered with Carbonized Anthracite.—

Temperature gradually raised to melting point of lead: then raised quickly to a white-heat.

Helmered three Carbons to Force Oct 15th 86.

(2)

In same box, subjected to same process, were some preliminarized Carbons. In neither case did lead touch the Filaments.—

Helmered two Carbons to Force Oct 15th 86.

No 11.

Cartonized in Lead.-

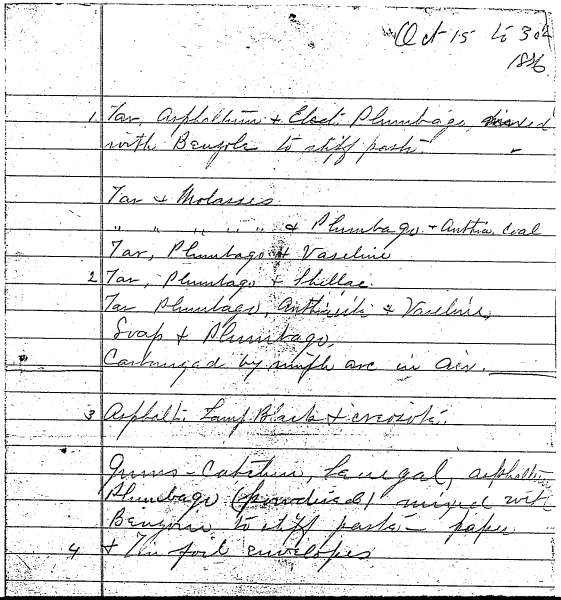
1) Bamboo Fibres, in cartonbox covered with lead-filings.
Temperature raised gradually re= quiring (2) two hours, to bring it to the melting-point of lead.- Then - raised quickly to a white heat.
Oct 18th 186

2) In same box, subjected to same process were my preliminarized fibres.

~~Had two cartons = Fibres~~
Oct 18th 186

Returned to Fosse, Jons cartons, same through as above.
Oct 21st 186

[ITEM FOUND IN BOOK]



Oct 15 46 304
BK

1 Tar, Asphaltum + Elect. Plumbago, mixed with Benzole to stiff paste.

Tar + Molasses

" " " " " " + Plumbago + Anthracene

Tar, Plumbago + Vaseline

2 Tar, Plumbago + Shellac

Tar Plumbago, Anthracite + Vaseline

Soap + Plumbago,

Carbonized by simple arc in air.

3 Asphalt Lamp Black + creosote

Gums - Catechu, Tragacanth, asphaltum Plumbago (granulated) mixed with Benzene to stiff paste - paper

4 + Tin foil envelopes